CLAIMS

We claim:

1. A method of visualizing a relationship between at least two entities having the steps of:

 (a) mapping the at least two entities onto a surface;

 (b) providing a relationship record for each of the at least two entities;

 (c) generating a display of the at least two entities together with at least one connector between the at least two entities for said visualizing said relationship from said relationship record; and

 (d) said connector having two ends connected to a pair of said at least two entities, said connector having an extension between said two ends, said extension passing out of said surface, said connector having a plurality of strands wherein each of said plurality of strands corresponds to each of a plurality of relationships.

2. The method as recited in claim 1, wherein at least one of said plurality of strands passes out of said surface on one side of said surface and another of said plurality of strands passes out of said surface on an opposite side of said surface.

3. The method as recited in claim 1, wherein said each strand is distinguished from other strand(s) by a geometric gap therebetween.

4. The method as recited in claim 3, wherein said each strand has an arc height.

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5.   The method as recited in claim 4, wherein a missing strand is observed as a greater gap between remaining strands.

6.   The method as recited in claim 1, wherein said each strand is further distinguished with a texture.

7.   The method as recited in claim 6, wherein said texture is selected from the group consisting of line type, line weight, color, display frequency, and combinations thereof.

8.   The method as recited in claim 7, wherein said line type is selected from the group consisting of solid, and broken.

9.   The method as recited in claim 8, wherein said broken is selected from the group consisting of dashed, dotted, hashed, and combinations thereof.

10.   The method as recited in claim 7, wherein said color is a frequency within the visible spectrum.

11.   The method as recited in claim 7, wherein said display frequency is a pulsed display.

12.   The method as recited in claim 1, wherein said plurality of strands is displayed as a single strand.

13.   The method as recited in claim 1, wherein said plurality of strands is displayed as said plurality of strands.

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14. The method as recited in claim 1, wherein said at least two entities are clusters of members, said clusters having centroids, and said connector connects said centroids.

15. The method as recited in claim 14, wherein substrands extend from each of said members to said connector connecting said centroids.

16. The method as recited in claim 1, further comprising the step of positioning said display.

17. The method as recited in claim 16, wherein said positioning is selected from the group consisting of rotate, pan, zoom and combinations thereof.

18. The method as recited in claim 2 wherein the strands shown on one side of the surface indicate values exceed an upper threshold of a test and the strands on the other side of the surface indicate values lower than a low threshold for said test.

19. The method as recited in claim 18 wherein a change in either or both of said threshold value(s) causes strands to appear or disappear.

20. The method as recited in claim 1, wherein a user action may cause the display of all relationships corresponding to a given relationship type.

21. The method as recited in claim 1 wherein a directionality of a relationship is indicated by line type.

22. The method as recited in claim 1, wherein a user action may cause the display of either a single strand, aggregate strand, or multitextured strands.

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23.   The method as recited in claim 1, wherein each "dot" is a cluster of multiple entities.

24.   The method as recited in claim 23, wherein a user action may cause a display of cluster to cluster strands, cluster to entity strands, or entity to entity strands.

25.   The method as recited in claim 1, wherein said mapping is by two-way document/topic iteration logic.